# WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7: G06F 15/167, H04N 7/10, 7/14, 1/14, 1/00

(11) International Publication Number:

WO 00/43899

(43) International Publication Date:

27 July 2000 (27.07.00)

(21) International Application Number:

PCT/US00/01699

A1

(22) International Filing Date:

21 January 2000 (21.01.00)

(30) Priority Data:

09/235,781

22 January 1999 (22.01.99)

US

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(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

#### **Published**

With international search report.

Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

### (54) Title: METHOD AND APPARATUS FOR MULTIPLEXING SEPARATELY-AUTHORED METADATA FOR INSERTION INTO A VIDEO DATA STREAM

#### (57) Abstract

An authoring system for interactive video has two or more authoring stations (11) for providing authored metadata to be related to a main video data stream and a multiplexor for relating authored metadata from the authoring sources to the main video data stream. The authoring stations (11) annotate created metadata with presentation time stamps (PTS) from the main video stream, and the multiplexor relates the metadata to the main video stream by the PTS signatures. In analog streams PTS may be created and integrated. In some embodiments there may be multiple and cascaded systems, and some sources may be stored sources. Various methods are disclosed for monitoring and compensating time differences among sources to ensure time coordination in end product. In different embodiments transport of metadata to an end user station is provided by Internet streaming, VBI insertion or by Internet downloading. User equipment is enhanced with hardware and software to coordinate and present authored material with the main data stream.

